

a first calculating unit setting a representative frequency with respect to a carrier wave frequency, at least one upper sideband frequency and at least one lower sideband frequency and calculating the mutual impedance, as a common mutual impedance for the interior wave frequency, upper sideband frequency and lower sideband frequency among elements at that representative frequency; and

a second calculating unit solving simultaneous equations under the moment method having the common mutual impedance calculated by the first calculation unit for the carrier wave frequency, upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna.

2. (ONCE AMENDED) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 1, further comprising:

a decomposing unit applying one of LU decomposition and LDU decomposition on a matrix of the common mutual impedance calculated by the first calculating unit,

wherein the second calculating unit solving the simultaneous equations under the moment method using the matrix of the common mutual impedances decomposed by the decomposing unit.

3. (ONCE AMENDED) An apparatus for calculating immunity from a radiated electromagnetic field which segments an antenna and electronic apparatus into elements, calculates a mutual impedance among elements, and solves simultaneous equations under the moment method defining a relationship among the mutual impedance, a wave source and an electric current flowing through the electronic apparatus so as to simulate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna, comprising:

a first calculating unit setting a representative frequency with respect to a carrier wave frequency, at least one upper sideband frequency and at least one lower sideband frequency and calculating the mutual impedance among elements at that representative frequency;

a second calculating unit solving simultaneous equations under the moment method having the mutual impedance calculated by the first calculating unit, while ignoring a wave source of the electronic apparatus, for one of the carrier wave frequency, upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna; and

a third calculating unit calculating the electric currents, other than the electric current calculated by the second calculating unit, flowing through the electronic apparatus due to a radio wave radiated by an antenna, by proportional operations, by using the electric current calculated by the second calculating unit and a value of a wave source of the antenna at the frequency, from among the carrier wave frequency, upper sideband frequency and lower sideband frequency, for which the second calculating unit calculated the above electric current and a value of a wave source of the antenna that the frequency other than the above frequency for which the second calculating unit calculated the above electric current.

4. (ONCE AMENDED) An apparatus for calculating immunity from a radiated electromagnetic field which segments an antenna and electronic apparatus into elements, calculates a mutual impedance among elements, and solves simultaneous equations under the moment method defining a relationship among the mutual impedance, a wave source and an electric current flowing through the electronic apparatus so as to simulate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna, comprising:

a first calculating unit setting a representative frequency with respect to a carrier wave frequency, at least one upper sideband frequency and at least one lower sideband frequency and calculating the mutual impedance among elements at that representative frequency;

a second calculating unit solving simultaneous equations under the moment method having the mutual impedance calculated by the first calculating unit the one of the carrier wave frequency, upper sideband frequency and lower sideband frequency which overlaps a frequency, including a higher harmonic component, of a wave source of the electronic apparatus, to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna;

a third calculating unit solving the simultaneous equations under the moment method having the mutual impedance calculated by the first calculating unit for one of the frequencies not used in the calculation by the second calculating unit to calculate the electric current, other than the electric current calculated by the second calculating unit, flowing through the electronic apparatus due to a radio wave radiated by an antenna, and

a fourth calculating unit calculating the electric current, other than the electric currents calculated by the second and third calculating unit, flowing through the electronic apparatus due to a radio wave radiated by an antenna, by proportional operations, by using the electric current

calculated by the third calculating unit and a value of a wave source of the antenna at the frequency, from among the carrier wave frequency, upper sideband frequency and lower sideband frequency, for which the third calculating unit calculated the above electric current and a value of a wave source of the antenna at the frequency other than the above frequency for which the third calculating unit calculated the above electric current.

5. (ONCE AMENDED) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 4, further comprising:

a decomposing unit applying one of LU decomposition and LDU decomposition on a matrix of the mutual impedance calculated by the first calculating unit,

the second and third calculating unit solving the simultaneous equations under the moment method using the matrix of mutual impedance decomposed by the decomposing unit.

28. (ONCE AMENDED) A method for calculating immunity from a radiated electromagnetic field which segments an antenna and electronic apparatus into elements, calculates a mutual impedance among elements, and solves simultaneous equations under the moment method defining a relationship among the mutual impedance, a wave source and an electric current flowing through the elements so as to simulate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna, comprising:

a first processing operation setting a representative frequency with respect to a carrier wave frequency, at least one upper sideband frequency and at least one lower sideband frequency and calculating the mutual impedance among elements at that representative frequency;

a second processing operation solving simultaneous equations under the moment method having the mutual impedance calculated at the first processing operation, while ignoring a wave source of the electronic apparatus, for one of the carrier wave frequency, upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna; and

a third processing operation calculating the electric currents, other than the electric current calculated at the second processing operation, flowing through the electronic apparatus due to a radio wave radiated by an antenna, by proportional operations, by using the electric current calculated at the second processing operation and a value of a wave source of the antenna at the frequency, from among the above carrier wave frequency, upper sideband

frequency and lower sideband frequency, for which the above electric current was calculated at the second processing step and a value of a wave source of the antenna at the frequency other than the above frequency for which the above electric current was calculated at the second processing step.

29. (ONCE AMENDED) A program storage medium storing programs used for realization of an apparatus for calculating immunity from a radiated electromagnetic field which segments an antenna and electronic apparatus into elements, calculates a mutual impedance among elements, and solves simultaneous equations under the moment method defining a relationship among the mutual impedance, a wave source and an electric current flowing through the electronic apparatus so as to simulate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna, storing a program for executing by a computer:

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a first calculation processing of setting a representative frequency with respect to a carrier wave frequency, at least one upper sideband frequency and at least one lower sideband frequency and calculating the mutual impedance, as a common mutual impedance for the carrier wave frequency, upper sideband frequency and lower sideband frequency, among elements at that representative frequency; and

a second calculation processing of solving simultaneous equations under the moment method having the mutual impedance calculated at the first calculation processing for the carrier wave frequency, upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna.

30. (ONCE AMENDED) A program storage medium storing programs used for realization of an apparatus for calculating immunity from a radiated electromagnetic field, which segments an antenna and electronic apparatus into elements, calculates a mutual impedance among elements, and solves simultaneous equations under the moment method defining a relationship among the mutual impedance, a wave source and an electric current flowing through the electronic apparatus so as to simulate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna, storing a program for executing by a computer:

a first calculation processing of setting a representative frequency with respect to a

carrier wave frequency, at least one upper sideband frequency and at least one lower sideband frequency and calculating the mutual impedance among elements at that representative frequency;

a second calculation processing of solving simultaneous equations under the moment method having the mutual impedance calculated at the first calculation processing, while ignoring a wave source of the electronic apparatus, for one of the carrier wave frequency, upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the electronic apparatus due to the radio wave radiated by an antenna; and

a third calculation processing of calculating the electric currents, other than the electric current calculated at the second calculation processing, flowing through the electronic apparatus due to a radio wave radiated by an antenna, by proportional operations, by using the electric current calculated at the second calculation processing and a value of a wave source of the antenna at the frequency, from among the above carrier wave frequency, upper sideband frequency and lower sideband frequency, for which the above electric current was calculated at the second calculation processing and a value of a wave source of the antenna at the frequency other than the above frequency for which the above electric current was calculated at the second calculation processing.

31. (ONCE AMENDED) A program storage medium storing programs used for realization of an apparatus for calculating immunity from a radiated electromagnetic field which segments an antenna and electronic apparatus into elements, calculates a mutual impedance among elements, and solves simultaneous equations under the moment method defining a relationship among the mutual impedance, a wave source, and an electric current flowing through the electronic apparatus so as to simulate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna, storing a program for executing by a computer:

a first calculation processing of setting a representative frequency with respect to a carrier wave frequency, at least one upper sideband frequency, and at least one lower sideband frequency and calculating the mutual impedance among elements at that representative frequency;

a second calculation processing of solving simultaneous equations under the moment method having the mutual impedance calculated at the first calculation processing for the one of the carrier wave frequency, upper sideband frequency and lower sideband frequency which

overlaps a frequency, including a higher harmonic component, of a wave source of the electronic apparatus, to calculate the electric current flowing through the electronic apparatus due to the radio wave radiated by an antenna;

a third calculation processing of solving the simultaneous equations under the moment method having the mutual impedance calculated at the first calculation processing for one of the frequencies not used at the second calculation processing to calculate the electric current, other than the electric current calculated at the second calculation processing, flowing through the electronic apparatus due to a radio wave radiated by an antenna; and

a fourth calculation processing of calculating the electric current, other than the electric currents calculated at the second and third calculation processings, flowing through the electronic apparatus due to a radio wave radiated by an antenna, by a proportional operation, by using the electric current calculated at the third calculation processing and a value of a wave source of the antenna at the frequency, from among the above carrier wave frequency, upper sideband frequency and lower sideband frequency, for which the above electric current was calculated at the third calculation processing and a value of a wave source of the antenna at the frequency other than the above frequency for which the above electric current was calculated at the third calculation processing.

33. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field which simulates an electric current flowing through an electronic apparatus due to a radio wave radiated by an antenna, comprising:

a managing means for managing antenna information for realizing a prescribed intensity of an electric field on the electronic apparatus;

an acquiring means for acquiring antenna information used for the simulation from the managing means when a request for simulation is issued;

a calculating means for segmenting the electronic apparatus and an antenna specified by the antenna information acquired by the acquiring means into elements, calculating a mutual impedance among elements, and solving simultaneous equations under the moment method defining a relationship among the mutual impedance, a wave source and an electric current flowing through the electronic apparatus so as to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna; and

the calculating means comprising:

a first calculating means for setting a representative frequency with respect to a carrier

wave frequency, at least one upper sideband frequency and at least one lower sideband frequency and calculating the mutual impedance, as a common mutual impedance for the carrier wave frequency, upper sideband frequency and lower sideband frequency, among elements at that representative frequency, and

a second calculating means for solving simultaneous equations under the moment method having the common mutual impedance calculated by the first calculation means for the interior wave frequency, upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna.

34. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field which simulates an electric current flowing through an electronic apparatus due to a radio wave radiated by an antenna, comprising:

a managing means for managing antenna information for realizing a prescribed intensity of an electric field on the electronic apparatus;

an acquiring means for acquiring antenna information used for the simulation from the managing means when a request for simulation is issued;

a calculating means for segmenting the electronic apparatus and an antenna specified by the antenna information acquired by the acquiring means into elements, calculating a mutual impedance among elements, and solving simultaneous equations under the moment method defining a relationship among the mutual impedance, a wave source and an electric current flowing through the electronic apparatus so as to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna; and

the calculating means comprising:

a first calculating means for setting a representative frequency with respect to a carrier wave frequency, at least one upper sideband frequency and at least one lower sideband frequency and calculating the mutual impedance, as a common mutual impedance for the carrier wave frequency, upper sideband frequency and lower sideband frequency, among elements at that representative frequency,

a second calculating means for solving simultaneous equations under the moment method having the common mutual impedance calculated by the first calculation means for the interior wave frequency, upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an

antenna, and

a third calculating means for calculating the electric currents, other than the electric current calculated by the second calculating means, flowing through the electronic apparatus due to a radio wave radiated by an antenna, by proportional operations, by using the electric current calculated by the second calculating means and a value of a wave source of the antenna at the frequency, from among the carrier wave frequency, upper sideband frequency and lower sideband frequency, for which the second calculating means calculated the above electric current and a value of a wave source of the antenna at the frequency other than the above frequency for which the second calculating means calculated the above electric current.

35. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field which simulates an electric current flowing through an electronic apparatus due to a radio wave radiated by an antenna, comprising:

a managing means for managing antenna information for realizing a prescribed intensity of an electric field on the electronic apparatus;

an acquiring means for acquiring antenna information used for the simulation from the managing means when a request for simulation is issued;

a calculating means for segmenting the electronic apparatus and an antenna specified by the antenna information acquired by the acquiring means into elements, calculating a mutual impedance among elements, and solving simultaneous equations under the moment method defining a relationship among the mutual impedance, a wave source and an electric current flowing through the electronic apparatus so as to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna; and

the calculating means comprising:

a first calculating means for setting a representative frequency with respect to a carrier wave frequency, at least one upper sideband frequency and at least one lower sideband frequency and calculating the mutual impedance, as a common mutual impedance for the carrier wave frequency, upper sideband frequency and lower sideband frequency, among elements at that representative frequency,

a second calculating means for solving simultaneous equations under the moment method having the common mutual impedance calculated by the first calculation means for the interior wave frequency, upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an



antenna,

a third calculating means for calculating the electric currents, other than the electric current calculated by the second calculating means, flowing through the electronic apparatus due to a radio wave radiated by an antenna, by proportional operations, by using the electric current calculated by the second calculating means and a value of a wave source of the antenna at the frequency, from among the carrier wave frequency, upper sideband frequency and lower sideband frequency, for which the second calculating means calculated the above electric current and a value of a wave source of the antenna at the frequency other than the above frequency for which the second calculating means calculated the above electric current, and

a fourth calculating means for calculating the electric currents, other than the electric currents calculated by the second and third calculating means, flowing through the electronic apparatus due to a radio wave radiated by an antenna, by proportional operations, by using the electric current calculated by the third calculating means and a value of a wave source of the antenna at the frequency, from among the carrier wave frequency, upper sideband frequency and lower sideband frequency, for which the third calculating means calculated the above electric current and a value of a wave source of the antenna at the frequency other than the above frequency for which the third calculating means calculated the above the electric current.

36. (NEW) A storage storing information enabling a computing device to perform a process for calculating immunity of an electronic apparatus from a radiated electromagnetic field, the process comprising:

a managing process managing antenna information for realizing a prescribed intensity of an electric field on the electronic apparatus;

an acquiring process acquiring antenna information used for the simulation from the managing process when a request for simulation is issued;

a calculating process segmenting the electronic apparatus and an antenna specified by the antenna information acquired by the acquiring process into elements, calculating a mutual impedance among elements, and solving simultaneous equations under the moment method defining a relationship among the mutual impedance, a wave source and an electric current flowing through the electronic apparatus so as to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna; and

the calculating process comprising:

a first calculating process for setting a representative frequency with respect to a carrier

wave frequency, at least one upper sideband frequency and at least one lower sideband frequency and calculating the mutual impedance, as a common mutual impedance for the carrier wave frequency, upper sideband frequency and lower sideband frequency, among elements at that representative frequency, and

a second calculating process for solving simultaneous equations under the moment method having the common mutual impedance calculated by the first calculation process for the interior wave frequency, upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna.

37. (NEW) A storage storing information enabling a computing device to perform a process for calculating immunity of an electronic apparatus from a radiated electromagnetic field, the process comprising:

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X a managing process managing antenna information for realizing a prescribed intensity of an electric field on the electronic apparatus;

an acquiring process acquiring antenna information used for the simulation from the managing process when a request for simulation is issued;

a calculating process segmenting the electronic apparatus and an antenna specified by the antenna information acquired by the acquiring process into elements, calculating a mutual impedance among elements, and solving simultaneous equations under the moment method defining a relationship among the mutual impedance, a wave source and an electric current flowing through the electronic apparatus so as to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna; and

the calculating process comprising:

a first calculating process setting a representative frequency with respect to a carrier wave frequency, at least one upper sideband frequency and at least one lower sideband frequency and calculating the mutual impedance, as a common mutual impedance for the carrier wave frequency, upper sideband frequency and lower sideband frequency, among elements at that representative frequency,

a second calculating process solving simultaneous equations under the moment method having the common mutual impedance calculated by the first calculation process for the interior wave frequency, upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an

antenna, and

a third calculating process calculating the electric currents, other than the electric current calculated by the second calculating means, flowing through the electronic apparatus due to a radio wave radiated by an antenna, by proportional operations, by using the electric current calculated by the second calculating means and a value of a wave source of the antenna at the frequency, from among the carrier wave frequency, upper sideband frequency and lower sideband frequency, for which the second calculating means calculated the above electric current and a value of a wave source of the antenna at the frequency other than the above frequency for which the second calculating means calculated the above electric current.

38. (NEW) A storage storing information enabling a computing device to perform a process for calculating immunity of an electronic apparatus from a radiated electromagnetic field, the process comprising:

a managing process managing antenna information for realizing a prescribed intensity of an electric field on the electronic apparatus;

an acquiring process acquiring antenna information used for the simulation from the managing process when a request for simulation is issued;

a calculating process segmenting the electronic apparatus and an antenna specified by the antenna information acquired by the acquiring process into elements, calculating a mutual impedance among elements, and solving simultaneous equations under the moment method defining a relationship among the mutual impedance, a wave source and an electric current flowing through the electronic apparatus so as to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an antenna; and

the calculating process comprising:

a first calculating process setting a representative frequency with respect to a carrier wave frequency, at least one upper sideband frequency and at least one lower sideband frequency and calculating the mutual impedance, as a common mutual impedance for the carrier wave frequency, upper sideband frequency and lower sideband frequency, among elements at that representative frequency,

a second calculating process solving simultaneous equations under the moment method having the common mutual impedance calculated by the first calculation process for the carrier wave frequency, upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the electronic apparatus due to a radio wave radiated by an

antenna,

a third calculating process calculating the electric currents, other than the electric current calculated by the second calculating means, flowing through the electronic apparatus due to a radio wave radiated by an antenna, by proportional operations, by using the electric current calculated by the second calculating means and a value of a wave source of the antenna at the frequency, from among the carrier wave frequency, upper sideband frequency and lower sideband frequency, for which the second calculating means calculated the above electric current and a value of a wave source of the antenna at the frequency other than the above frequency for which the second calculating means calculated the above electric current, and

a fourth calculating process calculating the electric currents, other than the electric currents calculated by the second and third calculating process, flowing through the electronic apparatus due to a radio wave radiated by an antenna, by proportional operations, by using the electric current calculated by the third calculating process and a value of a wave source of the antenna at the frequency, from among the carrier wave frequency, upper sideband frequency and lower sideband frequency, for which the third calculating process calculated the above electric current and a value of a wave source of the antenna at the frequency other than the above frequency for which the third calculating process calculated the above the electric current.

39. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 33, further comprising:

a setting means for setting a threshold voltage for a position between specified conductor elements; and

an alarm means for comparing a voltage generated and a specified position between conductor elements, derived by making the voltage generated across a resistor, virtually inserted between the conductors, one obtained if the resistor has an infinitely large resistance, and the threshold voltage set by the setting means and outputting information on whether said voltage exceeds said threshold voltage or not.

40. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 33, further comprising:

a first computing means for assuming a state where there is no electronic apparatus, segmenting the antenna to be registered in the managing means into elements, calculating the mutual impedance among these elements, and solving the simultaneous equations under the

moment method defining the relationship among the calculated mutual impedance, wave source of the antenna, and an electric current flowing through the elements so as to calculate the electric current flowing through these antenna elements;

a second computing means for calculating the intensity of the electric fields which the electric current calculated by the first calculating means causes in the electronic apparatus at different locations of installation; and

an executing means for changing the distance between the antenna and electronic apparatus and the value of the weight source of the antenna to determine the specific distance and value of the weight source giving the prescribed intensity of electric field calculated by the second calculating means and registering the thus prescribed antenna information in the managing means.

41. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 39, further comprising:

a first computing means for assuming a state where there is no electronic apparatus, segmenting the antenna to be registered in the managing means into elements, calculating the mutual impedance among these elements, and solving the simultaneous equations under the moment method defining the relationship among the calculated mutual impedance, wave source of the antenna, and an electric current flowing through the elements so as to calculate the electric current flowing through these antenna elements;

a second computing means for calculating the intensity of the electric fields which the electric current calculated by the first calculating means causes in the electronic apparatus at different locations of installation; and

an executing means for changing the distance between the antenna and electronic apparatus and the value of the weight source of the antenna to determine the specific distance and value of the weight source giving the prescribed intensity of electric field calculated by the second calculating means and registering the thus prescribed antenna information in the managing means.

42. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 40, wherein

said first calculating means solves the simultaneous equations under the moment method for one frequency among a carrier wave frequency, of upper sideband frequency and

lower sideband frequency to calculate the electric current flowing through the antenna.

43. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 33, wherein

said first calculating means solves the simultaneous equations under the moment method for one frequency among a carrier wave frequency, of upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the antenna.

44. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 33, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

45. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 39, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

46. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 40, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

47. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 41, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations

under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

48. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 42, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

49. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 43, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

50. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 34, further comprising:

a setting means for setting a threshold voltage for a position between specified conductor elements; and

an alarm means for comparing a voltage generated and a specified position between conductor elements, derived by making the voltage generated across a resistor, virtually inserted between the conductors, one obtained if the resistor has an infinitely large resistance, and the threshold voltage set by the setting means and outputting information on whether said voltage exceeds said threshold voltage or not.

51. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 34, further comprising:

a first computing means for assuming a state where there is no electronic apparatus, segmenting the antenna to be registered in the managing means into elements, calculating the mutual impedance among these elements, and solving the simultaneous equations under the moment method defining the relationship among the calculated mutual impedance, wave source

of the antenna, and an electric current flowing through the elements so as to calculate the electric current flowing through these antenna elements;

a second computing means for calculating the intensity of the electric fields which the electric current calculated by the first calculating means causes in the electronic apparatus at different locations of installation; and

an executing means for changing the distance between the antenna and electronic apparatus and the value of the weight source of the antenna to determine the specific distance and value of the weight source giving the prescribed intensity of electric field calculated by the second calculating means and registering the thus prescribed antenna information in the managing means.

52. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 50, further comprising:

a first computing means for assuming a state where there is no electronic apparatus, segmenting the antenna to be registered in the managing means into elements, calculating the mutual impedance among these elements, and solving the simultaneous equations under the moment method defining the relationship among the calculated mutual impedance, wave source of the antenna, and an electric current flowing through the elements so as to calculate the electric current flowing through these antenna elements;

a second computing means for calculating the intensity of the electric fields which the electric current calculated by the first calculating means causes in the electronic apparatus at different locations of installation; and

an executing means for changing the distance between the antenna and electronic apparatus and the value of the weight source of the antenna to determine the specific distance and value of the weight source giving the prescribed intensity of electric field calculated by the second calculating means and registering the thus prescribed antenna information in the managing means.

53. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 51, wherein

said first calculating means solves the simultaneous equations under the moment method for one frequency among a carrier wave frequency, of upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the antenna.



54. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 52, wherein

said first calculating means solves the simultaneous equations under the moment method for one frequency among a carrier wave frequency, of upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the antenna.

55. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 34, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

56. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 50, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

57. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 51, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

58. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 52, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual

admitting this and mutual reaction.

59. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 53, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

60. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 54, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

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61. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 35, further comprising:

a setting means for setting a threshold voltage for a position between specified conductor elements; and

an alarm means for comparing a voltage generated and a specified position between conductor elements, derived by making the voltage generated across a resistor, virtually inserted between the conductors, one obtained if the resistor has an infinitely large resistance, and the threshold voltage set by the setting means and outputting information on whether said voltage exceeds said threshold voltage or not.

62. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 35, further comprising:

a first computing means for assuming a state where there is no electronic apparatus, segmenting the antenna to be registered in the managing means into elements, calculating the mutual impedance among these elements, and solving the simultaneous equations under the moment method defining the relationship among the calculated mutual impedance, wave source of the antenna, and an electric current flowing through the elements so as to calculate the

electric current flowing through these antenna elements;

a second computing means for calculating the intensity of the electric fields which the electric current calculated by the first calculating means causes in the electronic apparatus at different locations of installation; and

an executing means for changing the distance between the antenna and electronic apparatus and the value of the weight source of the antenna to determine the specific distance and value of the weight source giving the prescribed intensity of electric field calculated by the second calculating means and registering the thus prescribed antenna information in the managing means.

63. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 61, further comprising:

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a first computing means for assuming a state where there is no electronic apparatus, segmenting the antenna to be registered in the managing means into elements, calculating the mutual impedance among these elements, and solving the simultaneous equations under the moment method defining the relationship among the calculated mutual impedance, wave source of the antenna, and an electric current flowing through the elements so as to calculate the electric current flowing through these antenna elements;

a second computing means for calculating the intensity of the electric fields which the electric current calculated by the first calculating means causes in the electronic apparatus at different locations of installation; and

an executing means for changing the distance between the antenna and electronic apparatus and the value of the weight source of the antenna to determine the specific distance and value of the weight source giving the prescribed intensity of electric field calculated by the second calculating means and registering the thus prescribed antenna information in the managing means.

64. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 72, wherein

said first calculating means solves the simultaneous equations under the moment method for one frequency among a carrier wave frequency, of upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the antenna.

65. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 63, wherein

said first calculating means solves the simultaneous equations under the moment method for one frequency among a carrier wave frequency, of upper sideband frequency and lower sideband frequency to calculate the electric current flowing through the antenna.

66. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 35, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

67. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 61, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

68. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 62, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

69. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 63, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

70. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 64, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

71. (NEW) An apparatus for calculating immunity from a radiated electromagnetic field as set forth in claim 65, wherein when considering a dielectric, a mutual admitting this and a mutual reaction among the elements at the representative frequency are calculated in addition to the mutual impedance and processing is performed in accordance with simultaneous equations under the moment method, considering a dielectric, having the mutual impedance, mutual admitting this and mutual reaction.

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